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ABSTRACT

Convened by representatives of 15 private liberal arts colleges, this conference addressed the role and place of the library in the liberal arts college, the needs of academic users, and alternatives to current practices. This collection of presentations and reports includes "Introductory Remarks," by Robert E. R. Huntley; "Collection Development in Private Colleges," by William E. Hannaford, Jr.; a panel discussion on "Research and the College Collection: Perspectives," moderated by Thomas Nye; discussions on the role of research in a college, the role of campus research in shaping the college library collection, and means other than the traditional collection a library may use to support campus research; and a summary of the conference by William J. Watt. A list of participants is included. (RAA)

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LIBRARY RESOURCES FOR COLLEGE SCHOLARS

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Transactions of a Conference held at

WASHINGTON AND LEE UNIVERSITY

Lexington, Virginia

February 14-15, 1980

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Robert E. Danford, *Editor*

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Foreword

February 14 and 15, 1980, saw representatives of fifteen Virginia private liberal arts colleges meet at Washington and Lee University in Lexington to discuss "Library Resources for College Scholars." Although the subjects covered are not new ones to those concerned about the practice of collection development, the types and needs of research efforts on campus, and the effect that newer information technology has on these aspects of the college educational process, the exchange of views among librarians, teachers, researchers, and administrators was refreshing, enlightening, and valuable for all involved. This exchange and awareness was a primary goal of the meeting as no one came expecting to give or to receive a definitive answer to the problems that face institutions confronting these issues today.

The myriad questions for which there are no definitive answers must, however, be dealt with. Financial stringency, variable enrollments, and inflation on the one hand *versus* professional research more sophisticated research and teaching programs for undergraduates, and the tantalizing promises of commercial information services on the other pose dilemmas in the college and library as always limited resources must be rationally distributed in a manner consistent with the present needs of the library users and the future needs of the college as a whole.

The financial and educational pressures of the present challenge colleges and their libraries to reassess every aspect of their institutional, educational, professional, and financial commitment to quality liberal arts education to see that quality maintained and improved. It is also necessary that the entire academic community be aware of the issues so that an institution can plan for a balanced approach toward solving the problems and meeting the needs of the community it serves.

The participants of the conference met to hear representative views from each segment of the college community and to discuss common concerns with others from similar institutions. It must be emphasized again, and President Huntley of Washington and Lee will emphasize in his remarks, that no one expected this conference to produce a definitive answer or set of answers to questions which may ultimately be unanswerable. But this conference is another attempt to approach a definition of the role and place of the library in a liberal arts college; to discuss the needs that the college and its students, teachers, and administrators feel must be met by the library; and to learn of some pos-

sible alternatives to current practice which have not been heretofore examined in the context of a liberal arts college. Such opportunities are rare, and their rarity only emphasizes the value of meetings such as this which pose problems, suggest some solutions, and which, more importantly, promote an exchange of ideas and opinions which help institutions examine their present and future approaches to increasingly difficult problems and their increasingly difficult solutions.

—Robert Danford

The Program

LIBRARY RESOURCES FOR COLLEGE SCHOLARS
The University Library
February 14-15, 1980

FEBRUARY 14

Presiding
Maurice D. Leach Jr.
University Librarian
Washington and Lee University

"Remarks"
Robert E. R. Huntley
President
Washington and Lee University

"Collection Development in Private Colleges"
William E. Hannaford
Acquisitions Librarian
Middlebury College

"Research and the College Collection: Perspectives"
Panel
— Thomas Nye, *Moderator*
Chairman, Library Advisory Committee and Head of the Biology Department
Washington and Lee University

— Craig Cornett
Politics major
Washington and Lee University

— John R. Handelman
Associate Professor of Politics
Washington and Lee University

— Sidney M. B. Coulling
Professor of English and Head of the Department
Washington and Lee University

— John Ryland
Librarian
Hampden-Sydney College

— C. Freeman Sleeper
Vice-President and Dean of the College
Roanoke College

Discussion Groups

A. What is the role of research in a college?
Leader — Roberta Stewart, *Dean*
Hollins College
Recorder — Mary Scudder,
Librarian
Lynchburg College

B. What role should campus research play in shaping the college library collection?
Leader — Steven Roehling,
Assistant Librarian
Emory and Henry College
Recorder — William Pollard,
Librarian
Mary Baldwin College

C. What collection development

procedures are effective?
Leader — William Hannaford,
Acquisitions Librarian
Middlebury College
Recorder — Ruth Ann Edwards,
Librarian
Randolph-Macon
Woman's College

D. What means, other than its traditional collection, can a library use to support campus research?
Leader — Dennis Robison,
Librarian
University of Richmond
Recorder — Milo D. Stahl,
Director of Learning Resources
Eastern Mennonite College

Recorders report to the audience

FEBRUARY 15

Presiding
Maurice D. Leach

"The role of Commercial Information Retrieval Systems in the College Library"
Robert Williams, *Assistant Professor of Library Science*
College of Librarianship
University of South Carolina

Demonstrations of Three Information Retrieval Systems
BRS — Liz Marlow
LOCKHEED — Richard Caputo
SDC — Irene Norris

"Summary of the Conference"
William J. Watt
Dean of the College
Washington and Lee University

Library Resources for College Scholars

MAURICE D. LEACH JR.
University Librarian
Washington and Lee University

It is a pleasure to welcome you to this conference which is being held as a part of our dedication events honoring this new library.

We began planning for the library in the fall of 1968 and we are very fortunate today to have a building which expresses so well the philosophical and physical goals as envisioned by our faculty, students, administrators and librarians. This library building places its primary emphasis upon the student and the faculty member interested in intellectual and personal development. It is designed for their convenience and comfort, for them to study and to relax among the books, the periodicals, the microimages, the computer terminals, and any other format of information and cultural resource currently known.

Wonderful as new library buildings are, they are only successful when their resources and services complement the physical facility to the enlightenment of "man's unconquerable mind." Therefore, we want to raise the question of what, if any, library resources are needed to support research interests of faculty and students in a privately supported liberal arts college. We are all aware of the infinite potential for study on the smallest of campuses and we are also aware of the many limitations we face in supporting these interests. How then do we acquire those resources which support the desired academic excellence?

Is it feasible for the college to support specific and comprehensive library collections for individual research programs; to utilize the growing technology, especially the computer which "goes off" campus; to encourage shared acquisition programs; or to develop practical referral networks as we attempt to resolve the frustrations of the explosion of knowledge and of inflation?

We trust that you will be "stirred up" and that your deliberations will provide each of us with new ideas.

Introductory Remarks

ROBERT E. R. HUNTLEY
President of Washington and Lee University

My main purpose, and probably the only one I am qualified to serve here, is to extend to you a formal, as well as informal, welcome to this campus and to thank you for sharing your time with us in the next couple of days. We hope, obviously, that your visit here will be productive for you; we know it will be for us.

Maurice has already alluded to most of the questions which arrive on my desk in one form or another having to do with the library. Obviously, we are proud of this building and are pleased not only with its appearance and its design but, more important than that, we are pleased with the symbolism it has for us as the focal point — not merely the physical focal point, but the functional and psychological, if you wish, focal point — of this campus. We wish to say through this building that Washington and Lee's dedication to its academic pursuits and to its teaching function must remain our central focus and that all else that we do, as important as it may be, must be justified and related to that central purpose. That is at least the symbolism that this building has for me. It remains to be seen in the months and years and decades ahead whether or not the school is able to fulfill the promise that it has made by building this structure. We hope that the discussions here today and tomorrow will be helpful to us in setting and plotting and maintaining that course.

As Maurice has pointed out, the questions related to library operations are manifold. But those kinds of questions are not the primary ones you will be addressing; you will be addressing more specifically the central one of the library's collections. To what degree is it appropriate, proper, requisite to think of the collection of the library as the central focus of the university's budgetary planning? Is it appropriate to think, as I am inclined to do, of all other forms of assistance to the teachers in scholarship, research, and teaching as trade-off's against the book budget? That's the traditional way for librarians and, at least, for this college president to think about it. I am not inclined — administrators are notoriously conservative people and more so the longer they stay in office, so I'm never inclined — to change the biases I begin with. Nevertheless, that seems to me a sort of focal point of discussion that I hope you will engage in during these sessions and that at least will concern me and Maurice in the years ahead. For example, there is the growing need for, use of, and request for various kinds of audio-visual and other sorts of equipment of that kind. Is that properly

thought of as a subtraction from, as a trade-off against, the acquisition of more traditional forms of scholarly material, to wit, books? The same question needs to be raised with regard to other forms of technology. Are the retrieval devices and the advanced technologies which are either on hand or are promised to be on hand in the decade ahead properly regarded as being traded off against — as being in competition with — the university's acquisition of traditional resources in the form of books? To what extent should the university community, specifically the faculty, the department heads, and to some degree the students, be involved in formulating, on a year-to-year basis, the acquisitions policy as well as policies with regard to those other matters? And if they are to be involved to any great degree, how is that done? Obviously, these are questions none of us is going to answer here in the next two days, and the questions, I guess, will remain the same for all time, even if the answers change. But it's good, I think, from time to time to stop and look at them.

The question Maurice has alluded to, the role of research on a principally teaching campus, is the broad question, and the aspect of that question one needs to be concerned about in the library is to what degree do the librarian and his staff devote themselves in acquisitions policy to supporting specific research efforts of a given department or a given faculty member or a given group of students. Washington and Lee has attempted over the years, and takes some pride in the fact that it has some success in this respect, to provide opportunities, funded to some degree, for its students to engage in research activity either independently or, in many cases, in collaboration with a member of the faculty. Washington and Lee, of course, strives to provide its faculty with opportunities for scholarly progress and for research to the degree that its resources allow it and to the degree that it can be achieved in support of, as distinguished from being in competition with, the teaching function. These questions then, as far as the library is concerned, come down each year to an issue of whether or not a portion of what has to be a finite budget should be allocated to the acquisition of collections which will be utilized presumably by very small numbers of the university community, but for, presumably, very useful purposes. Again, the question remains the same; the answers, from time to time, have to change.

But those are the kinds of questions that arise each year, and, with this new structure, I think will arise with increasing insistence in the discussions which Mr. Leach and the Dean and I must have soon, and each spring thereafter, about how much of the finite resources of the school can be spent for those purposes in the year to come and how they should be spent. It's perhaps bad that college presidents always end up thinking in those mundane terms. The effort that administration must make, of course, and that you and others like you can help us to make is not to be overwhelmed by the mundane questions, but to try to retain some perspective on the broader vistas that we are trying to see and the objectives we're trying to achieve. Groups like this can help us do that and we are grateful to you for sharing your time and your talent and your wisdom with us. Thank you.

Collection Development in College Libraries

WILLIAM E. HANNAFORD JR.
Middlebury College Library

Collection development, in general, is presently one of the most discussed and still least well-known and researched areas within librarianship. Specifically, as far as college libraries are concerned, there is a lack of almost any corpus of literature. In this paper, I will concentrate on several aspects of collection development as they apply to private college libraries. Then I will say a bit about the study I did this summer with a fellowship awarded me by the Council on Library Resources and, finally, I will be so bold as to offer a few suggestions on how collection development might best be accomplished in college libraries.

Before beginning any discussion of collection development, it is important to get straight just what it is and what it is not. First, what it is not. Collection development is not merely the selection or acquisition of books and periodicals, nor is it the evaluation or weeding of a collection, nor the allocation of funds, nor even all of these together with a host of other activities. No library I know of fails to engage in most, if not all, of these activities which, when properly combined, are part of collection development. Although most libraries do select, weed, evaluate, and budget and allocate, I wish to claim that most still do very little collection development. What is it, then, that constitutes collection development, above and beyond the sum total of the parts or activities that make it up?

For the purposes of this paper, and certainly for argument, collection development may be defined as the intentional and systematic building of a library collection. That is, it is the purposeful and methodical — rational, if you will — shaping and molding of a collection. There are, of course, certain constraints such as money, clientele, purpose and the like within which collection development must occur, but these are the topic of another paper. To put it another way, collection development is the activity of intentionally and systematically building a library collection superimposed upon the individual activities or parts which make it up; i.e., selection, weeding, evaluating, and budgeting and allocating. Collection de-

velopment is, then, more than just the sum total of the parts for which it is often mistaken. Thus, it is possible, given the above definition of collection development, to select, weed, evaluate, budget and allocate, and yet do no collection development. All of the parts are vitally important, but they do not themselves constitute collection development.

In the brief analysis just completed, it is clear that something, in this case someone, is missing. This someone is the collection developer, the person who gives intention and system to collection development. All of the other parts of collection development might be in place, but if there is no collection developer, all is for naught.

There are, at the present moment, at least two widespread models of the collection developer in practice. One is that of the super-bibliographer, a Renaissance person supposedly so well-versed in all of the literatures and languages of the world, or at least the publishing practices, that he or she can mold and shape a collection almost single-handedly. The second model is that of the collection manager. In this model, the collection developer has the primary function of overseeing the building of the collection; the molding and shaping of the collection — its very design — must come from or through the hands of this person. This does not imply, though, that the collection manager is or must be a super-bibliographer. In fact it has been argued, and I would argue at another time, that these latter are like dinosaurs. The collection manager may do some selecting and the like, but he or she does not do nearly all of it. What the manager does do is consult with, cajole, and hustle others, i.e., faculty, librarians and students, who, in turn, help to build the collection.

The collection developer, as manager, is like an architect or choreographer. An architect designs a building, oversees its construction, and may even become involved in building. A choreographer, likewise, designs in effect, a dance, oversees its performance, and may even be one of the dancers. Analoguously, the collection developer designs the collection, oversees its building, and may even be one of those making selections, doing weeding, etc. Both good architects and choreographers listen to the advice and counsel of others, and so does the good collection developer. A collection built in concert, but under the guiding hand of one individual, has the best chance of being a collection well-suited to its purpose.

In summarizing, let me again say that collection development is the intentional and systematic building of a library collection. This involves the selection, weeding, and evaluation of materials and the budgeting and allocation of funds, all under the management of the collection developer.[1]

Now that I have given something of an ideal of what collection development should be, let me discuss the study I did last summer. This will present an interesting juxtaposition between the ideal and current practice.

In June of 1979, I visited and surveyed ten small private academic libraries — those of Bowdoin, Bates, and Colby in Maine; Wellesley and Amherst in Massachusetts, Trinity in Connecticut, Union, Hamilton, and Colgate in New York, and, of course, Middlebury in Vermont. The main objective of the study was to find out what, if anything, was going on in the way of collection development in these libraries.

The methodology of the study was, simply put, that of personal interview, usually with the director of the library, but in several cases also with the associate/assistant director and the acquisitions librarian. Armed with a questionnaire, I normally arrived at the library of the day early in the morning and departed late in the afternoon. The answers I received did not always fit the neat pigeonholes I would have them fit, but the questionnaire served its purpose as a catalyst for discussion quite well.

The college libraries studied were chosen because they are similar in purpose, number of librarians, student enrollment, FTE faculty, volumes added annually to the library,

holdings, and budgets for materials.[2] For the study, the single most important factor was probably that of the materials budget because it is indicative of what can be accomplished in the way of collection development. Almost all of the libraries had budgets in the $200,000 to $300,000 range for fiscal year 1978/79.

In each library, with the aid of the questionnaire, I looked for certain tell-tale signs that collection development might be occuring. There are, undoubtably, a large number of such tell-tale signs, but I thought the following among those most obvious and easiest to detect:

1. written collection development policies
2. control of and responsibility for the materials budget in the library
3. the presence of a collection developer in the library
4. librarians who select, weed, evaluate and budget
5. the presence of a collection development organization, i.e., faculty liaison.

What did I find when I sorted the empirical data and matched it against my ideal of collection development? In a word, I found that most of the libraries where not doing collection development, though most all were quite busily involved in the various activities which go to make it up. Specifically, among my findings were:

1. that several libraries have no collection developer, more commonly known as a chief collection development officer
2. that several libraries have no collection development organization and that most have only a minimal one
3. that most of the libraries have no mechanism for systematically reviewing all continuing obligations; eg., a serials review committee
4. that internally generated bibliographic records are being only sparingly used for collection development
5. that in several libraries no one person reviews all selections
6. that there are few libraries with any written collection development policies
7. that few of the libraries select, weed or evaluate in a really systematic way
8. that in most libraries the materials budget is allocated to departments rather than by subject
9. that the allocation of the materials budget is done by historical precedence and percentage.

These findings support, I think, the conclusion that a number of the libraries serve as processing agents for the faculty of the college who by and large do most of the selection. Further, very little weeding, evaluating, or sophisticated allocating is being done. These findings, coupled with the fact that in a number of the libraries there is no collection developer, lead to the conclusion that some college libraries, at least some that I visited, are not really molding and shaping their collections. To put it the way I did earlier, since selecting, weeding, evaluating, and budgeting and allocating are not being carried out in an intentional and systematic fashion, the conclusion follows that collection development is simply not being done in most college libraries.

Lest this conclusion sound too harsh, let me soften it a bit. As I said above, all of the libraries visited are adding materials to their collections, most are certainly weeding items now and again, most are making some kind of evaluative statements about their collections, and, finally, all are receiving funds to cover these activities. What is not being done that is collection development is to combine and carry out all of these activities in an intentional and systematic way under the guiding hand of a single individual.

As a way of clarifying what has been said above, let me give an example. Library collections are often built almost accidentally, unsystematically and by no collection developer. The situation is analogous to a building designed by many architects with no

single person in charge. The building may get built, but it does not look like much and does not serve its clientele well.

How can the situation be improved? Let me be presumptuous enough to offer a few recommendations,[3] without going into them in any detail at this point. This latter can be done at another time.

1. Assign one librarian to be the collection developer or chief collection development officer. In many colleges this position might best be assigned to an associate or assistant librarian, a college bibliographer, or the acquisitions librarian because of the time constraints on the librarian.
2. Set up a formal faculty liaison structure to insure reasonable faculty input into the collection development process.
3. Write collection development policies, one each for selecting, weeding, evaluating, and budgeting and allocating, using the quidelines developed by the Collection Development Committee;[4] then follow them.
4. Appoint a serials review committee to review all ongoing library commitments, i.e., serials and continuations. This committee might be made up of the collection developer, the head of reference, another librarian, and a faculty member to insure several viewpoints.
5. Allocate the materials budget by subject rather than by department. This makes it clear to everyone who has responsibility for the budget and allows for selection by a larger number of people and for fewer gaps in the selection process and in the collection.
6. Begin to budget and allocate using modelling techniques already developed.

The above recommendations are meant to be suggestive of the way to good collection development, though they may only signal a beginning of a definitive model. More research obviously needs to be done in the area of collection development in college libraries. This paper should be seen as a foray into a still largely uncharted area.

The one issue I have studiously avoided is that of the research function of a college library. I have avoided it because my view is, I think, a controversial one. Many college libraries are presently in the ironic situation of having the faculty do most of the collection building while at the same time claiming primarily to serve undergraduate students. It is precisely this irony that underscores one of the most difficult questions in all of librarianship: what is the research role of the college library? While there is, obviously, no simple or easy answer to this question, let me briefly spell out a few of the issues and tell you where I stand.

To put the question another way, is it the role of the college library to support faculty research, student research, or both? This question, in turn, breaks down into several others: if the main function of college libraries is to serve the faculty, who is to serve the student? If it is to serve the student, who is to serve the faculty? And if it is to serve both, who is to provide the funding? With limited funding, the choice may become disjunctive; i.e., either the faculty or the students, but not both, may be served.

When the choice is either one or the other but not both, where should we stand? I think that we should stand with the students, and I think this for several reasons. Even if we choose to serve faculty research needs, and neglect the students', we probably can not build an adequate research collection. Further, it is usually less expensive to send the faculty to the collection than to bring the collection to the faculty; this is not true in the case of students. Last, faculty research needs are more long-term and well-planned than those of students who generally need materials right away, and faculty have greater access to other collections than do students.

In closing, I should say that the choice most of us make is not disjunctive, need not be, and thus is not nearly as bleak as I have

made it sound. We can develop our collections primarily for students and secondarily for faculty. This does the faculty very little disservice. At the same time, we can build more comprehensive research collections in highly selective areas and keep building upon these strengths. If, on the other hand, we try to do what we cannot do, i.e., build research collections across the board, then we do a disservice to both faculty and students.

NOTES

[1]For another discussion of this matter see William E. Hannaford, Jr., "Toward a Theory of Collection Development," in *Collection Development* (Greenwich, Conn.: JAI Press, 1980).

[2]See "Selected Library Statistics for 1978/79," compiled by Arthur Monke, Librarian of Bowdoin College.

[3]For a discussion of and recommendations for collection development in college libraries, see William Miller and D. Stephen Rockwood, "Collection Development from a College Perspective," *College and Research Libraries* 40 (July 1979): 318-324.

[4]American Library Association, Resources and Technical Services Division, Collection Development Committee, *Guidelines for Collection Development* (Chicago: American Library Association, 1979).

Research and the College Collection: Perspectives

A PANEL DISCUSSION

The following papers are reflections on the various aspects of studying, doing research, and providing for research in the college of today. The panel includes a representative from each constituent element in the library environment: a student, a teacher and researcher who is involved in the newer forms of research using electronic data, a more traditional humanistic scholar, a librarian, and an administrator. Each speaker may be concerned with the library and its collection in a different manner and each may expect something unique from the library, but all are strongly affected by the library and how it perceives of and molds its collection, just as the library is affected by each user's needs, expectations, and demands and must try to serve these users adequately.

The purpose of a panel such as this is to assert and review the needs and desires of each group of users, reminding all of the multitude of sometimes conflicting, often expensive, but equally valid areas of concern which are important to each group and, consequently, to the entire body. If research of various types is to be carried out on the college campus — and it is apparent that it is now and may be increasing on the rise in a quality program — then the library, its clientele, and its host institution must be conscious of each others' expressed needs so that proper preparation and development can be made to insure balanced and adequate service to the entire user group in conformity to the institution's goals.

A Student's Perspective on Research and the College Library

P. CRAIG CORNETT
Washington and Lee University

Let me preface my remarks by saying how honored I am to be participating in this panel with such a distinguished group of educators. I must admit that what I am going to say is obviously based on my own limited contact with the academic world as I have spent but three-and-one-half years as a student at Washington and Lee. I shall share with you the perspective of students on research in private university and college libraries.

I would like to begin by saying that I truly believe that most undergraduate students today do not feel intellectually challenged or motivated by their studies. I believe that this is a nation-wide phenomenon among college students and is not unique to any one area of the country, any one group of people, or any one type of institution. Too frequently today students are looking only for professional fulfillment; that is, getting a good education only so that they will become more valuable commodities in the marketplace, rather than looking for intellectual fulfillment for their own personal needs. I am sure that this is due, in part, to the lack of a concrete definition of what it takes to become an educated man or woman. Students have difficulty in synthesizing diverse courses of study and identifying major themes in the humanities, the social sciences, and the natural sciences. Indeed, I understand that many experts agree that my generation will be the first generation to be less educated than the preceding generation. I say all of this only to make the point that intellectual stimulation is too often not the prime concern of academic institutions. I believe that nothing can better stimulate a person's mind and add more to their education than individual research, and this is where the college library enters the picture.

First, what is the role of research in a college? Some students believe that research is nothing more than an aid to general education and course requirements — something tedious and troublesome. But I contend that research plays a vital role in every student's education. Individual research allows a student to develop expertise in a particular field that he probably would not be allowed to do if he relied only on work in the classroom. I hope to attend graduate school and my research has helped me get a better understanding of what I will study in years to come. Research allows the student to become familiar with many interdisciplinary resources that may demonstrate how various fields are interrelated. In doing research for an independent study project last year, I was amazed at how many different disciplines I

had to work with, such as economics, sociology, psychology, history, and business administration, even though the independent study was actually done in the politics department. Individual research allows the student to strengthen skills in reading, writing, and thinking critically, to set priorities and to recognize the strength and validity of certain arguments or assumptions. It also gives the student an opportunity to develop creative skills and possibly to explore new fields or areas of interest. I once took a course that was divided into two parts. Originally I was interested only in the second half of the material, but by doing a research project related to the first half, I came away with new appreciation and some new insights. And finally, research allows the student to see learning in action because the college library is the epitome of the wide and varied world of education.

Second, what role should research play in shaping the collection of a college library? Let me begin here by saying that if I were a college professor, I am sure that I would put a premium on research skills and would require significant term research projects. I know that many professors share this belief and my many hours in the library are evidence of this. The library should encourage student research by coordinating acquisitions activities with both the faculty and the students. I was very pleasantly surprised to find many new sources for my independent study when I returned to Washington and Lee in September. I had asked the librarians to watch for new books, articles, and government documents being published on my subject.

I recognize the difficulty in developing a college collection for research purposes and I have no answer for the question of what a library should do about a student or professor who requests materials on the most esoteric of topics. But the general sources, especially the reference sources, should be plentiful and easily accessible. Indeed, I believe that the reference room should be the busiest place in a library — this is true, incidently, at Washington and Lee. The library should support research outside of the classroom as well. I work with a major student organization that requires significant use of library materials, especially reference materials and periodicals. I believe that other out-of-the-classroom organizations at other universities should find the library as helpful to them as this one has been to me.

And finally, what means other than the traditional collection can a library use to support campus research? There are many options open besides the collection. Reference and public services play a great role in encouraging campus research. A helpful reference librarian who can give a student some direction, guidance, and encouragement is a most welcomed individual. I have found that the enthusiasm of the librarians can easily be transferred to the students. Term paper clinics run by the library staff are most helpful; they may last only an hour or two, but they help give the student a sense of comfort in using the library. I have found that one of the most useful courses I have taken at Washington and Lee was a one-credit course in bibliographic resources in politics and the social sciences. This course, run jointly by the librarians and the politics department, gave me a new perspective on research. I am still using the skills I developed in that class to write research papers.

In conclusion, I would like to present a passage from the Washington and Lee Statement of Institutional Philosophy — something I ran across while doing research in the library. It is the purpose of this University to work for

> . . . the dedication of all of its resources to the development of man's capacity and desire to learn, to understand and to pass on to others the varied benefits of this intellectual growth.

I believe that a purpose such as this, which I am sure is not unique to Washington and Lee but is fairly indicative of private liberal arts institutions, can be greatly aided by the college library and, more specifically, by research activities that students and faculty may undertake there.

The Library as a Center for Empirically Based Social and Political Research

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The remarks that follow are designed to accomplish two things. First, I shall attempt to describe the operations of the Inter-University Consortium for Political and Social Research (ICPSR), the single most important institution for the dissemination of social science data in the United States. Second, I shall outline some of the opportunities that exist for a university library in terms of managing the on-campus research, bibliographic, and reference problems that are just beginning to be recognized in the wake of the surge in empirically based analysis of social phenomena.

The ICPSR is centered at the University of Michigan in Ann Arbor and is a cooperative venture involving over 220 colleges, universities, and research institutions around the world. The Consortium was organized in 1962 by a handful of universities, and was designed at that time to service the needs of a relatively small group of political scientists. Since 1962, not only has membership grown, but the clientele has been broadened to include researchers engaged in the study of virtually all forms of human behavior. The ICPSR is now pertinent to economists, sociologists, geographers, psychologists, and historians as well as political scientists. Increasingly, the ICPSR is called upon to meet the needs of specialists in the fields of education, public health, social work, public administration, foreign policy, law, criminal justice, as well as others.

The ICPSR receives, processes, and distributes machine-readable data on social phenomena for over 130 nations in the world. Surveys of mass and elite attitudes with regard to U.S. elections (the original substantive focus of the ICPSR) have been augmented at an amazing rate by studies involving census records; international interactions; socioeconomic characteristics of nations and their subdivisions; historical data of an economic, social, electoral, and institutional nature; intergovernmental organization information; and much, much more. Studies within the archive range from such themes as "Left-and Right-handedness" to "Norwegian Ecological Data, 1868-1903." Perhaps more revealing of the richness of the ICPSR's archive is an indication of recent uses at Washington and Lee of data that the Consortium has provided. Various American national election studies have been analyzed by students in the context of class projects as well as in individual research efforts. Survey data gathered within the European Economic Community have been used by students in an effort to gauge public opinion

concerning the future of the Community. Voting data from Britain, Germany, Norway, and France have been analyzed by students in introductory Comparative Politics courses. Students in American Foreign Policy have had access to surveys of American military and business elites, and they have been able to examine more precisely the nature of these elites' perceptions than would otherwise have been the case. In sum, the ICPSR is a clearinghouse for quantitative information relating to any number of social phenomena, and it is provided to members in such a way that further analysis and investigation is relatively easy.

Regardless of the substantive focus of the study that a member might request from the ICPSR, the data arrive in one of two forms. The data are either provided on punched cards or on magnetic tape — tape being much more common today. Magnetic tape has a much longer life than cards and a much greater amount of data can be stored on tape than is convenient on cards. In fact, it is not unreasonable to expect that the responses of 250,000 people to 100 questions could be easily contained on one 2400 ft. tape. Normally, a member institution will request several studies at the same time from the ICPSR — all of the data being included on a single tape. Once the contents of the tapes have been verified and a back-up tape produced, the data may then be prepared for student or faculty use. Without going into detail here, this final procedure usually involves formatting the data in such a way so that they may be analyzed using one of several statistical programs that are available for computer use.

In addition to the data, the ICPSR provides "codebooks" for the data sets requested. The codebook describes the data, how they were collected, the number of cases, and a description of the variables included.

For example, if survey research questions on a particular topic are asked of individuals, the individuals become the cases, the questions are the variables, and the responses to the questions are what everyone wants to look at. Indeed, the codebook alone can be a very valuable research aid.

Codebooks may come in three different forms: bound volumes, "machine readable," and microfiche. The bound volumes are perhaps the easiest to use and they are quite durable. Machine readable codebooks are produced at the ICPSR member institution. They are sent on tape along with the data which they describe and are printed out by the computer. These machine readable codebooks contain the same information as the bound codebooks, but they are not as durable and their "readability" has been criticized by some. Because of increased production costs, the ICPSR is rapidly moving towards microfiche as a medium for the presentation of data documentation. Obviously, this means that a microfiche reader is needed for the researcher at the member institution. Again, however, the same information is available as would be presented in a bound codebook. It is important to emphasize that without a codebook the data are useless to the researcher. The codebook identifies where particular information is to be found within the dataset and, without the codebook, the dataset is merely a mess of numbers. From time to time the ICPSR revises codebooks as a result of revisions within the dataset, correction of errors, or because some cosmetic change is desirable in order to make the data more valuable to the researcher. This updating means that it is important for the researcher to know which particular codebook pertains to which version of the data he is working with. In other words, an updating capacity at the member institution is essential.

Turning now to the question of the role of the library as a center for empirical political and social research, several comments appear relevant. At many institutions, the codebooks that the ICPSR provides are scattered about the campus, usually finding themselves in the offices of professors who have been working with the pertinent data. This reduces the visibility of the codebooks and, thus, the accessibility of the data. The

library is a logical center for the placement of codebooks, as they are legitimate research tools. From time to time, the ICPSR sends to member institutions codebooks for datasets that the institution has not requested in an effort to inform the member that the data is available. These codebooks, in addition to those for which data is available on campus, need to be placed centrally on the campus to make known the availability of the data. Again, the library is the logical depository for these codebooks.

Being more idealistic, the codebooks should be defined in the library's card catalogue with an indication on the catalogue card as to whether or not the data is available on campus. Additionally, the availability of data on campus, as well as appropriate documentation, could be determined by use of an on-line computer system. Terminals in the library, linked to the university's computer, could be used to determine what exists on campus in the area of research being explored, the extent of documentation available, and a description of the dataset(s) that might be useful. Currently here at Washington and Lee, we are attempting to put into operation just such a system, yet, as with any cataloguing system, constant attention and maintenance is required.

The ICPSR is not unaware of the problems of gaining access to the research materials it disseminates. The Consortium is currently initiating a nation-wide program, via the Telenet computer network, which will permit "dial-in" access from most major U.S. cities to the Michigan Terminal System. Such a service will provide for users' immediate information on the Consortium's archival holdings, as well as the ability to submit requests for data and their documentation via computer link-up. It would seem that such activities on campus should take place in a central location where monitoring activities of an appropriate nature can take place. It would seem, again, that the library is the logical location.

The ICPSR has recognized the potential that exists for the library of a member institution with regard to managing the data that it disseminates. In the context of a number of summer programs that the Consortium organizes, recent years have seen the inclusion of special workshops specifically designed for "data managers" and "data librarians." Of specific concern has been the absence of systematic bibliographic and reference control over the materials that the ICPSR circulates. The ICPSR feels that scholarly and other use of machine-readable data files is unnecessarily complicated, research and other applications are often frustrated, data collection efforts are needlessly duplicated, and even systematic scholarly citation is often difficult or impossible.

The problems that are alluded to above are not problems that will be solved through clerical efforts. The solution to what is an ever-growing set of concerns involves the creating of substantive expertise on the part of library personnel with regard to the resource tools of which we have spoken. Data about the world in which we live are not collected in a random fashion. There are normative decisions that are made, and these need to be understood by the researcher. Determining the availability and applicability of a particular dataset to the researcher is a complex task. The researcher is hard-pressed to understand all of the options and opportunities available to him. The library, with its staff, is uniquely equipped to aid the budding scholar in his dilemma. All of the implications of what has been suggested have not been clearly outlined, but the theme is clear. As empirical research continues to grow, the need for the same bibliographic and reference assistance that is currently provided to non-quantitative scholars will need to be extended to those dealing with quantitative resources.

In conclusion, it should be emphasized that the research problems and the scholarly dilemmas which have been noted above are not temporary; they are not going to disappear. The problems associated with quantitative analysis of social phenomena will continue to grow. "Number crunching," as

computer jockeys are apt to describe the kinds of research projects which are currently undertaken, will continue to be the dominant approach in the social sciences. The ICPSR, for example, has recently added to its archives the United States Law Enforcement Assistance Administration's National Crime Survey of Cities for 1972-1975. This study consists of 1,544,400 cases, 410 variables; amounting to 2,726,000 card images with over 200 pages of necessary documentation which describes 39 separate data files within the dataset. Control over, and management of, this kind of material should not, and cannot, be left to the myriad forces which currently handle on-campus empirical research materials. A central, on-campus authority must be responsible for this material, and the logical institution is the library.

The Role of the Professor in Scholarly Research

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To some this may not appear the most propitious time to speak of the role of the professor in scholarly research, especially when that professor holds his appointment in a department of English and when that department of English is located in a small liberal arts college. Last December, as I began preparing these remarks, there arrived in the mail a copy of a special issue of the *Bulletin* of the Association of Departments of English entitled "The State of the Discipline: 1970s-1980s." The picture it paints of the profession is as grim as the most despairing account of America's position in the world today. It insists, in article after article, that the teacher of English faces a situation which has become increasingly critical in recent years and that no prospect for improvement is in sight. As one writer puts it, with a sarcasm we might have been spared, a drastically changed student body, expressing altogether different needs and demands from those of the past, now threatens to destroy the privileged sanctuary of scholars, who for too long have remained isolated from the real world. Another writer caustically observes that the academic growth of the sixties led to an expansion of graduate facilities far beyond what was actually needed, and now, with shrinking enrollments, young graduates frantically seek to make a place for themselves in their chosen profession by publishing scholarly articles, only to discover that in today's world one both publishes and perishes. And still another argues that while on the one hand there are too many graduate schools, too many Ph.D.s, and too many scholars publishing in too many journals, on the other there are too many unprepared students to whom all of this scholarship is not even remotely relevant and who need to be taught, not the subtleties of *Hamlet* and *King Lear*, but the difference between a noun and a verb.

But by a happy coincidence the same mail that brought me these dreary tidings from English departments across the land brought me also the December 21st issue of the London *Times Literary Supplement*, which suggested the possibility that educational institutions might still be places of education. One of the pieces in the issue, a review of a *festschrift*, describes the collection as celebrating "Both the value and the pleasure of humane research," and another, a review of a brilliant new book on Thomas Love Peacock by a young English scholar, praises it for resting on "basic facts which literary criticism much too often ignores in pursuit of more exhilarating conjectures." But what is more

significant, the reviewer continued, inverting the argument for "relevance" that evolved in the sixties and now seems reincarnated in the form of "pragmatism" in the eighties, the book shows "how historical criticism at its best can bring us close to the meaning of a work in its own time and, paradoxically, through the intensity of its concern for full and accurate understanding, reveal a work's importance to us now." When I put down this issue of that venerable paper — that paper which has again demonstrated its resiliency by resuming publication after a long and paralyzing strike, that paper in which (I am told) one writer began his first column after a year's silence with the word "Moreover" — when, as I say, I put down this issue of the *Times Literary Supplement* I knew that not all of the world had been conquered by the Philistines.

Heartened by these words from across the Atlantic, I shall argue in my brief remarks that humane research is a central and indispensable activity in the life of an academic community; that it is of basic importance to the faculty member, to his students, and to the institution of which they are a part; and that those engaged in this research deserve, within reasonable limits, the resources, the facilities, and the encouragement necessary for carrying out their work.

Research is important, first of all, to the professor himself. Everyone knows that academic life is without the strains and tensions that bring on cardiac arrest, and this is as it should be in a profession requiring solitude and leisure for study. The danger, however, is that in such an environment one may become a premature victim of academic arteriosclerosis, and for him research is obviously a needed stimulus. But a more common casualty on campus is the conscientious professor who simply suffers from iron-poor blood. Over the years his vitality has been sapped by the pressures of academic life, which are almost impossible to explain to one who has not experienced himself the tyranny of meeting classes day in and day out and at the same time of trying to face them with some freshness and enthusiasm. For such a person research may act as a transfusion, restoring his energy and renewing his interest in a subject that had grown stale to him. Yet even if research does not always possess these healing properties, it is nevertheless a salutary activity. The professor needs the challenge of a different audience — an audience not of students, who challenge him in other ways, but of his peers, scholars of comparable knowledge and maturity. He needs the disciplining effect of research aimed toward eventual publication, which compels him to clarify his ideas, to support his assertions, to document his findings. And even if the result of this activity is a mixed product, a work that will receive censure as well as praise, that too can be salutary. J. Hillis Miller once observed that the "scholar is only one of a long line of tillers of the soil; he justifies himself by destroying the scholars who preceded him," and when he publishes he commits suicide by "offering himself up to be destroyed in his turn by the next scholar." One would hope that the process is not so brutal as this, but in any event it is not undesirable for the professor, who judges his students, to have his role reversed and to acquire the humility and the sense of humor that may come from being judged himself.

It is also important to students that their professors be engaged in research. No one denies that at times this engagement has been excessive and that students have suffered as a result. No one denies that shelved in virtually every library are books written by the graduate students of the putative authors; that there are professors who leave the privacy of their offices only long enough to make perfunctory appearances in class; that much of the unrest of the sixties derived from neglect of students and that many students today have needs more urgent than those served by traditional scholarship. But while all of this may be conceded, it should also be said that students may be given more attention than is good for them. They need to be placed more on their own academically than is usual in American education; they need to

be assigned independent work, to be compelled to formulate their own ideas and to reach their own answers. Ideally they need also to be engaged in research with their professors, as is the purpose of the Robert E. Lee Research Program at Washington and Lee. But even without such a program it is useful for students to see scholars actively engaged in research. They need to see, through living example, that education is a continuing process, that not all notes are recorded on pages yellowed by age, that not all knowledge is sought through the card catalog and found in an anthology, that the search for an answer to a question can take one through a maze of material, and that its discovery can be, in its way, as exhilarating as any other experience the student may have.

This, essentially, is why scholarly research is so important a part of the college or university. I know that what I now say is hopelessly out of fashion in some circles and an easy target for ridicule. There is today a widespread conviction that relatively little humane research is worthwhile and that much of it, in fact, is rubbish, written on trivial aspects of dead topics and produced by persons who have no aptitude for either research or English prose and who are driven solely by the need to gain tenure or advancement. And because of this conviction, behind which lies some of the disenchantment of the sixties, there is growing demand to give significantly less attention to traditional research and to encourage, with appropriate rewards, those toilers in the academic vineyard who are picking real grapes. Once again I do not deny that there is reason for such a viewpoint, but at the same time I must protest that it implies the application to scholarly research of an argument that is not applied elsewhere in the academic community. The professor who delivers a dull lecture is not thereupon relegated to perpetual silence; the sport represented by a losing team is not eliminated from the athletic program of the college; the committee that holds long and boring meetings is not, alas, abolished. The answer to poor research is not the discouragement of research but the incentive to do better research, on subjects of wider importance and interest, treated with greater imagination and pursued with more vigor. To study is by definition to be active — to be busy about learning — and thus a college or university without a faculty and student body actively engaged in research presents a contradiction in language.

Precisely how and to what degree a college or university should encourage this research depends, of course, on many factors that will vary from institution to institution. But I would argue that it should be committed to at least the following:

1. Support of its faculty in carrying out research projects: leaves of absence, remuneration for expenses incurred, financial assistance in study and publication, and promotions and salary increases as tangible recognitions of completed work
2. Provision for employment of research assistants, particularly student assistants, who give concrete expression to the ideal of research as a collective endeavor by faculty and students
3. Library resources and facilities — books, journals, study space, and so on — that may be reasonably requested for completion of the work
4. The creation of the kind of atmosphere on campus that is conducive to study, that encourages scholarly pursuits, that places the library in the center of college life and makes academic excellence the *raison d'être* of the institution.

This last, of course, is the most difficult to achieve, and beyond the power of any one of us. But to aspire to it is the objective of all of us and a primary goal of this conference.

The Practical Aspects of Collection Development

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Bill Hannaford has presented a challenging theoretical paper on the nature of collection development in a college library. I propose to go over quickly some of the practical aspects of collection development in a college library. I also intend to take a rather realistic approach.

The central theme of collection development in any library is selection. A large research library uses the "vacuum cleaner" approach. This means that it acquires all the current production in the areas in which it collects. That approach is not as easy as it seems, but it is certainly not appropriate for a college library. Selection in a college library is the crucial aspect.

Who selects? What is selected? How does one select and when? These are the major issues. Because of the short amount of time, I would like to review briefly these issues from a personal perspective.

Who selects? A great mistake made by many college libraries is to leave all or most selection of current books to the faculty. This is a mistake because of the delay in selection, the danger of too many areas not being covered, and the real possibility of selection not taking place. The bulk of the selection should be done by library staff. The faculty do not have the time to do this, particularly with the heavy teaching schedules and the new academic calendars. What the faculty should do is to participate in the establishment of collection development policies. There should be agreement between the faculty and the library on the areas which should be collected and the type of books and journals collected.

What does one select? The collection development policy, established by the library and faculty together, is the key document. Certain principles should be stressed in a policy for college libraries. The reference collection should be maintained at a high level with a good collection of bibliographical sources. The emphasis in book selection should be on acquiring primary sources, which will have a long shelf life, rather than every bit of secondary literature which happens to be published. The policy should also restrict collecting to those areas in which teaching and research occur in the college.

How does one select and when? What follows are a few of my own feelings on this subject. The selector should approach his job with the collection development policy in hand. Emphasis should be placed on current publications. Older publications should be acquired, but these should be very obvious selections. Critical judgements have already

been passed on these works. In order to avoid a frustration element, the works cited in the standard bibliographies should be acquired as funds permit. It is in this area that the reference librarian can make his greatest contribution as can the faculty members. However great the retrospective needs are, the current purchasing cannot be sacrificed. Ten to twenty years of a good current selection effort will yield a respectable library collection. Current selection must be our greatest priority.

A mistake made by many college libraries is to wait for reviews on the new books. This is a mistake because of the following reasons:

1. The ordering of a book only after it is reviewed means that there is a great delay in having the book available for the scholars. A college library presents so many frustrations to its scholars that this additional delay should be avoided. How does one order a book without a review? It is perfectly possible to predict many of the year's best books on the basis of the author, the publisher, and the nature of the book. I will predict now that Arlin Turner's biography of Nathaniel Hawthorne will be one of the year's major books. I would compare its stature with Karl's book on Conrad. It should be in every college library as soon as it is published in April by Oxford University Press — there is no need to wait for a review. The reviewers in *Choice*, for example, are no great scholars and the delay can be extensive.
2. Many books which have great value for the college library are not reviewed. This is particularly true in the social sciences.
3. The most interesting books may well have widely varying reviews.

In the area of periodical selection, the faculty role becomes more crucial. The method I prefer is to send the faculty a list of the current periodicals in their area and suggested additions and deletions. This will engage them in thoughtful discussion of what should be acquired. Certainly, a college library should not underestimate the role of periodicals. Certain principles should be applied. The library should have many of the periodicals indexed in the major indexing services which it provides. This reduces the frustrations of the young scholar. It should also subscribe to the periodicals which include regular surveys of the literature in their respective fields. This enables the scholar to keep up in his discipline. It is vital for the library to subscribe to as many periodicals as it can afford, and to change constantly its periodical list in order to reflect changes in the scope of the journals themselves as well as to reflect changes of interest in the library users. It is not necessary to have complete runs of these journals. Five-year backfiles should suffice. These last two points are major deviations from periodical policies at research libraries.

How does all this relate to the college scholar? The library cannot satisfy all of his needs. By following these principles, however, the frustrations he feels are reduced. First, by having a reference collection which contains good bibliographical sources, much basic foot work is reduced. By concentrating on acquiring primary sources rather than peripheral secondary sources, the library will have available those books most needed in research for the longest amount of time. The process of acquiring new books quickly and having a sufficiently large and well-chosen current periodical collection helps the scholar keep abreast of his field. Scholarship in the college, from the freshman writing his first research paper to the chaired professor writing his magnum opus, is essential for the college to remain alive. It is the responsibility of librarians to make this possible with the resources available.

Research and the College Collection: A Dean's Perspective

DR. C. FREEMAN SLEEPER
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Roanoke College

I appreciate the invitation to share with you today in this discussion of library resources. As the last speaker on this panel, I am reminded of the story one of the presidents of the University of Chicago who received a request from a women's organization for a speaker from the university. She specified that "We want someone who is young, handsome, witty, and a good speaker, and we don't want anyone lower than a Dean." To this, the President replied, "Madam, there is no one lower than a Dean." Frankly, I am not sure whether my remarks will spark a consensus or a controversy on the part of you who are professionally involved in library science, but I hope that we may find some common ground. There are four points which I want to make.

The role of the library collection, in any college or university, is to further the purpose and mission of the institution as a whole. In the self-study *Manual* published by the Southern Association of Colleges and Schools, the opening sentence of the section on the library makes this clear: "Has the institution developed for its library a statement of mission and objectives appropriate for the purposes, educational programs, and objectives of the institution?"[1] I take it for granted that we can agree on this first point. If not, I refer you to the chairperson of that committee for our current self study who is with us today and who will try to convince you.

There is undoubtedly a core collection of reference, periodical, and other indispensable material which is essential to any type of library collection. In my remarks, however, I want to focus on the particular issues facing the undergraduate liberal arts institutions granting nothing beyond the baccalaureate degree (Level II-B institutions).

In our type of college, research with the goal of producing new knowledge is *not* the primary criterion for developing a library collection. Teaching is our primary emphasis in terms of faculty performance. In fact, according to the recent policies adopted by the Roanoke College faculty for tenure and promotion review, individual faculty members may choose between 65 and 85 percent of their review to be based on classroom teaching.[2] Clearly, research and publication are not the top priority of the college. Furthermore, faculty development — the second major category in terms of performance review — is not limited to research in the traditional sense. Instead, we specify at least seven different areas in which faculty may demonstrate professional growth:

1. Attendance at professional meetings

2. Attendance at workshops, seminars, and short courses
3. Conduct of research
4. Presentation of a paper at a professional meeting
5. Conduct of a workshop, seminar, roundtable, or symposium at a professional meeting
6. Publication of an article, monograph, or book
7. Exhibition or performance of a work of art.

The implication of these faculty priorities is obvious, as I have already stated. The primary purpose of our library is not to develop a series of esoteric, highly specialized collections representing the research interests of a few members of the faculty. As I will argue later, there are other ways of satisfying those special interests which do not involve sacrificing the integrity of an undergraduate library.

There is always room for a limited number of special collections; however, because they are expensive to acquire and maintain, they should have some integral relationship to the history and purpose of the institution. Also, because of the limited availability of funds, they should be supported, if possible, by a separate endowment or by "perpetual donors."

In our type of college, the *curriculum* is the primary criterion for developing the library collection. As William Miller and D. Stephen Rockwood point out in their recent article "Collection Development from a College Perspective,"

> The college library needs to have a written collection development policy that specifically names its primary clients and attempts to delineate as far as is practical the kinds of books that *are not* appropriate for its primary collection goal.[3]

That article suggests that the collection should be student-centered. I would prefer to argue — and I think that is the intent of the article — that it should be curriculum-centered. In other words, the core of the collection should be those original sources, periodicals, reference materials, and collateral readings which are necessary for faculty members to prepare their courses well and for students to do the necessary research for those courses.

The first corollary is that the faculty must come to understand the purpose of the collection — that it must reflect institutional priorities and not their own personal preferences. That is the advantage of the quotation which I cited earlier, calling for a written policy which can be disseminated, interpreted, and implemented. Eventually, this will be reflected in the proportion of the budget allocated to departments and to the librarian. Once that is done, individual faculty and departments can learn to shape their book requests according to the institutional priorities. If they do not, the priorities can be achieved by shifting a greater proportion of the budget for acquisitions from the departments to the librarian.

A second corollary is the need to increase faculty participation in the development of an appropriate collection. As you all probably know, this involves saying "no" to many requests for items which will never be used. It involves sending suggestions to faculty for new items which they ought to consider but which they may have overlooked. It involves the cooperation of library staff in developing bibliographical lists for courses. It involves educating faculty, on a regular basis, about the resources which are available but unused.

If the curriculum is in fact the determining factor for the undergraduate collection, there is a third corollary which is that it is the responsibility of both the faculty and the library staff to increase student use of the library resources. The students are the ones for whom the teaching-learning process is carried on. They are ultimately the ones who support the library, financially if not physically. Among the people who had the greatest influence upon my own college education are a librarian and a secretary in the library who helped me to locate out-of-print books and to

develop the core of my own collection to the point where I was awarded the prize for the best undergraduate book collection. Unfortunately, or fortunately as the case may be, that acquisitiveness continues to afflict me. My point is simply that encouragement is important. It may be a professor who requires a research paper, the reference librarian who helps a student to locate a journal article, or the person on the reserve desk who is willing to answer a naive question — all of these may make a lasting impression on the student who is just beginning to realize the importance of learning and the importance of the library for learning.

If the curriculum, and not research, is the governing principle for the undergraduate library collection, what then is the proper role of the library in supporting faculty research? Indeed, what is the proper role of the administration in supporting such research? Just because research has a lower priority, we must encourage it or run the risk of seeing faculty wither intellectually.

My fourth point is that the library — as the most important academic support function of the college — must support faculty research in ways appropriate to the mission of the college. If we cannot build special collections tailored to individual interests, we must find other ways to encourage faculty development. I would argue that one task of the administration is to find money to subsidize inter-library loans for those volumes which the college cannot afford to purchase. Sabbatical leaves and research grants can send faculty to other libraries, but during an academic year it is usually easier to bring volumes from other libraries to our own campus. Special research funds must be available, either through the library or through the Dean's office, to subsidize legitimate library research projects.

Another approach, which I believe will have to become increasingly important for colleges in the same geographical area, is the sharing of resources: joint acquisitions, messenger service, cross-indexing, and so on. In a period in which our colleges face increasingly limited resources, this is one way in which we can maintain the quality which we all want.

Now, a concluding comment. I have deliberately not said anything about the impact of technology on the kind of information to be acquired, on the way that information is to be stored and retrieved, on the types of materials which are most useful in supporting the curriculum. President Huntley raised some of these questions in his remarks, and the program of this conference offers other opportunities to answer the questions. The broader issue confronting us, as administrators and librarians and faculty, is that raised by Maurice Leach: the issue of change. At one college, a retiring faculty member remarked, "I've been here for thirty years. I've seen lots of changes. Been opposed to every one."

We cannot afford that luxury. We must adapt to a changing technology. Even more important, however, we must adapt the technology to a changing curriculum. Only in that way can we meet the needs of both our faculty as researchers and of our students as learners.

NOTES

[1] *Manual for the Institutional Self Study Program of the Commission on Colleges* (Atlanta: Southern Association of Colleges and Schools, 1977), p. 32.

[2] *Roanoke College Faculty Handbook*, 6th ed. (Salem, Va.: the College, 1979), p. 26.

[3] William Miller and D. Stephen Rockwood, "Collection Development from a College Perspective," *College and Research Libraries* 40 (July 1979): 318-324.

Reports from Discussion Groups

Following the morning's session and the luncheon, the audience assembled and was separated into four sections to discuss four topics: What is the role of research in a college? What role should campus research play in shaping the college library collection? What collection development precedures are effective? What means, other than its traditional collection, can a library use to support campus research?

Each group included librarians, teaching faculty, and college administrators in an attempt to promote as diverse a sample of questions and opinions as possible. As will be evident below, this arrangement made for some repetition of discussion topics, but it also demonstrated the pervasiveness of certain concerns and gave the comforting assurance that no single group has a monopoly of concern on the many problems and potentials which face libraries and their parent institutions.

The discussion group concerned with the role of research in a college included the following topics and questions:

1. Discussed the definition of research and the role research plays in faculty reappointment, promotion, and tenure.
2. Students may be attracted to an institution whose faculty are renown.
3. What provisions are being made by colleges to promote research?
   a. Providing funds for ILL services
   b. Promoting travel to professional meetings and workshops
   c. Providing faculty research grants
   d. Providing sabbatical leaves
   e. Promoting joint faculty/student research projects
4. Student independent study can be encouraged and facilitated through advance planning and ILL. Students may, however, need to be referred to other institutions which offer more appropriate collections.
5. Career-oriented programs must sometimes be supported through special appropriations, especially as these programs often require duplication of resources.
6. The Virginia State Library is making progress on plans for COM catalogues and a revision of the *Virginia Union List of Serials*, both means of making larger

collections available to faculty and student researchers in the college.

7. Plans for the establishment of a National Periodicals Center may influence future research and acquisitions practices.

The group considering the question of the role campus research should play in shaping the college library collection concluded that:

1. The small college library must guard against the desire to be larger and more comprehensive than its mission and budget will allow.
2. The small college library should be student (i.e., curriculum) oriented.
3. The development of a written collection policy is important for proper growth.
4. Budget limitations are inevitable.

"What collection development procedures are effective" generated the following comments:

1. The college commitment to the idea that the library is central to the institution is evident from the library building and budget being a part of the administration's concern with the allocation of institutional resources.
2. The library must be aware of and must receive its share of institutional resources and must demonstrate its competance with guidelines for expenditure and with long-range plans.
3. There must be some form of evaluation of the collection.
4. There was a general consensus that collection development should involve faculty, librarians, and students who are aware of the various criteria which direct collection development.
5. Discussed the problems of and potentials for inter-library cooperation.

The group discussing the means, other than the traditional collection, that a library can use to support campus research made the following points:

1. Inter-library loan:
   a. Libraries can absorb costs of inter-library loan and thus support research of faculty.
   b. Increasing costs of inter-library loan, especially for the service from larger institutions is increasingly troublesome. How can we keep these larger institutions from cutting off all connections with small liberal arts colleges? Should we support more regional efforts?
2. Research library memberships:
   a. What is the status of the National Periodicals Center?
   b. We should attach ourselves to research libraries that have access to major databases.
   c. Lack of coordination in the subscription to database services on a campus may allow for unnecessary duplication of the same resources.
   d. It's difficult to obtain services of major research libraries for the average student's research, but for serious faculty research, the agencies are more facilitative.
3. Networking and on-line computer searching:
   a. State networking of the future may help us to improve our resources.
   b. On-line cataloging research may do away with a lot of serendipity in research, but we need to find ways to exploit technology in supporting humanistic research.
4. Community resources awareness:
   a. Meetings of this type heighten our awareness of new possibilities which we can publicize on our campuses.
   b. Faculty should be made aware of the many types of additional resources available outside the library build-

ing. There are more research sources (often primary) in our communities than we are initially aware.

c. Library committees can be used as agencies to apprise faculty on what research resources are available in other places.

5. Cooperation in building and using collections:

a. A mechanism should be developed to assure that major resources are available in one geographic area.

b. Cooperative efforts are necessary and helpful, but even with many of these efforts, we continue to do extensive duplication.

6. New communications technologies:

a. Communications technology is exploding and services are becoming better and less expensive. The video-disc is a form on which to obtain all kinds of information with great compactness as soon as it becomes generally available. The libraries of the world are being opened up to us through this new technology. Will our users become informed of this potential?

b. Are we going to have to do a lot of catch-up again in our collections in the use of the newer communications media?

c. Research is increasingly being done in many of the newer media formats. Do or will we have these media in our collections? Many video and audio materials are primary sources for researchers.

d. Cataloging of non-traditional media obtained from other than library budget resources does bring additional resources to more users.

e. While everything else is becoming more expensive, costs of electronic technology are becoming cheaper. We need to keep investigating costs of on-line vs. a print collection of the same item.

f. What is the support that electronics can be to future research? Will this support the scholar of humane letters? Should we always look at the reduction of costs as the reasonable way to solve our research problems?

g. How do we know what system to use if these systems continue to become obsolete?

7. Miscellaneous and general:

a. Give faculty transportation funds to take them where the sources are for research.

b. Utilize the industrial library resources of an area.

c. Some aid can be had by using reprints.

d. Disagreed on the value of granting funds to individual faculty directly for purposes of having them purchase their own resources for research. Illustrations of successful programs were cited. This type of funding does allow for obtaining some non-traditional resources which might never be known otherwise.

The Second Day

The second day of the conference was devoted to the subject of electronic information retrieval systems as both an extension of library service and a means of collection expansion in the college. If these systems are beneficial resources for scholars in the college, then the library must cope with the question of providing the services and insuring that they are compatible with the educational and research philosophies and practices of the college. Dr. Robert Williams of the University of South Carolina discusses these issues in the following presentation which began the second day's activities.

The Role of Commercial Information Retrieval Systems in the College Library or Have You Tried BRS/DIALOG/ORBIT?

ROBERT V. WILLIAMS
Assistant Professor, College of Librarianship
University of South Carolina

Students at the College of Librarianship at the University of South Carolina say that we have an unwritten school motto that is given in response to any and every question they ask; namely, "It all depends." While I do not intend for this to be a "library school lecture," I suspect that some of you will think that the motto has come unchanged to Virginia! I do not do it deliberately and would like for an answer, any answer, to be concrete and final with an unqualified response. However, few questions, particularly those relating to a complex organization like the library, have those kinds of answers.

In addressing the issue of "The Role of Commercial Information Retrieval Systems in the College Library," I feel that the best I can do for you is to raise what I consider the most important questions, and indicate some of the relevant variables that need to be considered in making decisions about the use of this resource. The *precise answers* will have to be supplied by you. Again, this is in keeping with another expression that my students accuse me of making when we talk about complex library issues; namely, "Let's bring some data to bear on the problem."

I will, therefore, raise some of the questions that seem relevant to this issue, point out some of the "it all depends" alternatives and, finally, bring a little data to bear on the problem. Ultimately, however, it will be up to you to consider your own library context, to consider the relevant variables in that context, to collect data on them and, finally, to come to your own conclusions and make a decision. This can be done individually, library by library, or collectively, working within a network of libraries.

What is the need?

The first question, whether there is a need for access to on-line databases in the library, may seem a bit ridiculous to professional librarians. After all, four years ago a survey was made of members of the American Library Association's (ALA) Reference and Adult Services Division (RASD) and 90 percent thought libraries should have some involvement with automated information retrieval systems.[1] And, it has been fifteen years, a long time in library automation development, since the first use of on-line literature searching by the National Aeronautics and Space Administration.[2] The question, however, does need careful consideration, particularly within the context of the college library where effects on objectives, staff, and budget may be greater than they are in large

university and public libraries. I think this is likely to be true because of the tradition that college libraries have in giving more personal service to undergraduate students. If I might hazard a guess at this stage, I would expect that the impact of commercial on-line bibliographic databases on reference work in all types of libraries will be as great as the effect of the development of the Ohio College Library Center (OCLC) on the work of technical services departments in libraries.

If my guess is anywhere near the mark, then the small college library must give careful consideration to the ways in which it chooses to use this new service. In my view, there are two subsidiary questions that should be addressed when considering the overall question of need. These are: what is the on-line database market like now and what is it likely to be in the future? Will access to these databases help us to meet our objectives more effectively, particularly in the provision of information service for faculty and students?

In 1972, Lockheed Information Systems' DIALOG service offered on-line access to one bibliographic database; in 1979, Lockheed offered access to 70 data bases. In 1970 there were no national on-line database service organizations available; in 1980 there are at least eight major national (with access available internationally) commercial on-line retrieval service organizations and numerous local and regional systems.[3] Today, there are more than 400 machine-readable bibliographic databases available and that number grows with each passing month.[4] There is no doubt that librarians have entree to a "growth industry" in the bibliographic database market and, when the more general indexing services, such as the H. W. Wilson Company, begin making their files available in machine-readable form, the possibilities — and market — will likely be even larger.

Access to the on-line bibliographic databases is only one aspect of the trends that are developing in this area. The three large suppliers, Lockheed's DIALOG, System Development Corporation's ORBIT, and Bibliographic Retrieval Services, Inc. (BRS) now offer a variety of other services such as the creation of your own personal database, ability to order complete copies of cited materials, and selective dissemination of information services. We can expect to see, as these and other companies compete for the "market share," additional services added over the next few years.

The answer to the question of the future then is: rosy. Access is widening, services are expanding, and prices, at least relative to other library goods and services, are falling. In terms of the small library, there are still a number of unsatisfactory features about the current situation; however, given the rapid changes in this area, these are likely to be dealt with in a few years. The most troubling of these features is the tendency for the databases to be highly specialized ones in scientific and technical fields that are of limited usefulness to libraries that do not give extensive support to research. This is changing and, to hazard another guess, it will likely change even more rapidly over the next few years. The recent advent of two new general-interest databases, *Magazine Index* and the *National Newspaper Index*, is an example of this trend. There are also indications that current users of the OCLC, Inc. system may have access to the commercial on-line databases through their regional networks. According to a recent article, this is one of the agenda items for study by the Council on Library Resources, Inc.[5]

The second sub-question, under the larger issue of need, is not so easily answered. Even if we assume that the objectives of small academic libraries are fairly similar, the options and activities open to any one library in accomplishing its objectives are usually quite different from those of another library. Such factors, or variables, as the type and size of academic programs, the depth of research that needs supporting in each program, and the extent of service commitment to students all need to be considered in making the decision that access to an on-line bibliographic database will help one accomplish objectives

more effectively. It seems fairly obvious that any resource that gives speedier access to a wide variety of literature would, *ipso facto*, be a wise move. Unfortunately, however, the use of finite library resources in one place precludes their use in another; tradeoffs are a fact of life and need to be carefully studied.

Specifically, I would advise that every library carefully answer (i.e., collect some factual data) the following questions before making the decision that use of an on-line database will help it accomplish its objectives more efficiently. These questions relate to the issue of needs/objectives; cost considerations will be treated shortly.

1. What research programs and materials in what fields are being supported in the college?
2. What are the specific literature and information needs of these programs?
3. What are the literature and information needs of faculty and students for classroom teaching purposes?
4. Overall, how successfully in terms of coverage and response time are we meeting the information needs of our users without use of on-line databases?

It should be obvious that answers to these questions are essential to the effectiveness of any academic library, whether or not contemplating purchase of a new service such as on-line databases. And most libraries can provide fairly accurate answers to these questions. Thus, with these answers in hand, one can now use them to answer a second set of questions that relate especially to the on-line database decision.

1. How many of the various on-line databases do we subscribe to in paper copy? Who uses them and how often?
2. How many of the on-line databases are not subscribed to in paper copy? What fields are they in and how likely is it that we will need access to them in some form?
3. What proportion of the literature indexed in the on-line databases do we have access to locally or through a network arrangement?
4. Are we encountering significant response time problems in meeting the literature searching needs of faculty and students? Is there a need among faculty members for delegated searches?
5. Is there some sizable community of potential users of our services outside the library that needs access to the literature indexed in the on-line databases? Will it pay for these services?

Answers to these questions are not going to be easily obtained and will require detailed study of some of the current operations of the library. I believe, however, that with answers to these questions — and there may be others even more pertinent to individual library situations — more informed decisions about need can be made. Taken together, answers to these two sets of questions should provide guidance in dealing with the larger issue regarding the extent to which purchase of the services of an on-line commercial database vendor will help you more effectively accomplish your library's objectives.

It may be that, despite my caveat of "it all depends," you are already tired of my giving you only questions and no answers. As a brief attempt at ameliorating that feeling, let me say that it is difficult to obtain good and factual information in the literature about the extent to which access to on-line databases helps one to meet objectives more effectively. There are a number of articles on what librarians, particularly in larger university libraries, are doing, but very little about what is happening in smaller academic and public libraries. Most of the articles tend to be a factual recounting of how the large libraries are using this new resource and little attention is paid to the analysis of needs and the accomplishment of objectives. It is true, of course, that one can argue that use of the commerical on-line databases could dramatically expand a library's access to litera-

ture. I believe, however, that this argument has merit only when counterbalanced with consideration to the extent to which the library will be able to provide an actual copy of the documents found via a search on these databases.

Perhaps the most troublesome issue of need, particularly for the college library, is to determine what kinds of access will be permitted by and for undergraduate students. The general impression has been that undergraduate students do not have sophisticated information needs that necessitate use of the on-line databases which generally provide access to technical literature. Recent articles on the topic indicate, however, that when undergraduates are allowed inexpensive ($10.00 to $20.00) access to on-line databases that they will use them and that their searching needs are fairly sophisticated.[6] This indicates that the college library should carefully study the issue of student needs before making policies in regard to access and funding.

What will it cost?

Let's assume then that you have given a positive answer on the needs/objectives question. The next question to be asked is what will it cost — immediately as well as over the long run. A recent article on the topic listed nine different cost components that need to be considered: terminal, personnel, telephone (installation and monthly connect charges), occupancy (space, electricity, etc.), telecommunications, vendor connect charges, vendor printing charges, database use, and database printing charges.[7] The costs for each library, of course, depend on a number of variables unique to decisions and use at each institution. The costs will also vary slightly depending on the particular vendor or vendors chosen. I am not going to attempt to provide you with cost comparisons for each vendor because these change too rapidly and are dependent on local factors. Needless to say, you will want to do this kind of comparison in detail before you make your choices of vendor. Instead, I am going to try and give you some rough idea of minimum start-up and on-going cost under certain specified conditions. Again, you will also want to do your own detailed analysis of these costs before you make your decision.

Start-up costs involve the following: telephone installation charges; occupancy costs; personnel, including training, costs; and terminal costs. Telephone installation will be about $50.00. Let's say that occupancy charges are zero because you can "make room" without needing an addition or modification to the library. Personnel costs could be large — need a new person — or small — use one of the reference librarians — depending on your conditions. Let's assume the latter and that all the librarian needs is a little training. Most vendors will provide this training very inexpensively, so let's say that the training and travel expenses are about $500.00. Terminal costs will vary depending on quality, speed, and whether it's purchased or leased. Let's assume lease, in case this venture is a mistake. So, for about $550.00 you can get started. Actually, for the price of telephone installation — about $50.00 — you could get started if you hired one of our graduates!

Obviously, what I have done is push all the major costs over into the on-going costs category to make start-up so cheap. However, this may be exactly what you want to do until you obtain a more concrete idea about need, problems of use, costs per search, and so forth. This conservative approach may be a wise one for the college library. It does, of course, increase the average monthly on-going costs.

These on-going costs consist of the following: phone charges, telecommunication charges (via Telenet/Tymnet on regular long distance); personnel; terminal rental; vendor connect hour/database use costs; database printing costs. Again, let's assume some kind of minimum usage levels. It will cost around $16.00 a month for the telephone. Assuming five hours a month, which should be enough time for about 60 searches, using Telenet at

$8.00 an hour is a total of $40.00 for telecommunication costs. Personnel we will again assume to be "free" (i.e., no additional costs) because you are using current staff. Obviously, however, this assumption will need careful scrutiny after some experience is gained. A good, relatively fast, terminal will lease at about $75.00 a month. If you go ahead with use of on-line databases, you will want to explore the economics of purchasing a terminal. Vendor connect hour/database use costs vary from supplier to supplier, from database to database and amount of time used annually, so this makes generalization about this category of costs rather inexact. Indications in the recent literature, conversations with users and others indicate, however, that $50.00 a connect hour for connect time/database use is a realistic figure to use for rough cost estimates. Using the 5 hours a month connect time figure, gives a monthly average of $250.00. Off-line citation printing charges will also vary depending on vendor, database, and the search. Let's assume a cost of ten-cents per citation and 20 citations per search for the 60 searches a month for a total of $120.00 a month for this category. Under all of these assumptions then, one has total charges of $500.00 monthly and $6,000.00 annually. Another way of looking at this figure is to say that each search will cost about $8.33. This figure is a bit low according to the recent literature which indicates that costs are running about $10.00 per search.

Is this an affordable cost for the small college library? The answer, obviously, is yes. That is, all of you spend a great deal more money than this for library materials and services each year; you do have the money. Assuming a library materials and supplies budget of $200,000 annually, this means spending about 3 percent of that figure for online access and use. In one sense, this is not a large proportion of the budget. However, when one considers that most libraries' budgets are already stretched to the limit and still do not have materials they would like, then it is a large amount of the money. In the absence of a magnanimous benefactor, or college president, who will give you this new money, something has to give to be able to afford on-line databases.

What are the Alternatives?

This brings us to our next question: what alternatives are open to the college library for affording these fees? Again, it all depends. As I see them, these dependent factors, stated in question format, are as follows:

1. Will access to these on-line databases permit us to discontinue our subscriptions to their paper (manual) files?
2. Is there some way that we can share these costs with other libraries in our area?
3. Is it possible to charge users varying rates for access to the on-line databases so that we can afford to serve all users? Is there a group of users in the community that needs this service and would be willing to pay above-cost rates?
4. Can we afford to pay all the charges for the services by building them into the regular library budget over a period of several years?

Answers to these questions are not easy to come by because, as I warned you, the data necessary for critical analysis are generally not available. I will, however, attempt to provide some tentative answers based on the literature and my own opinions. Obviously, it will be necessary for you to do a detailed analysis of your own situation.

Very little has been written on the possibilities for discontinuing paper file subscriptions to databases available on-line. The usual line of thinking is that one uses the commercial on-line databases for *extending* access or for more rapid response time than permitted by manual searching. There are indications in the literature — and I have heard this from my colleagues — that one should be able to drop part or all of one's subscriptions to some of the more expensive files, such as *Chemical Abstracts* or *Science Citation Index*. One librarian that I talked to said he had discontinued the annual index

volumes of one service and was taking only the abstracts volume. The usual pattern, however, is that one *hopes* that this can be done sometime in the future and will start to "politick" in that direction. There are a number of important factors at stake in this kind of decision and all have to be considered. Some of these are: Who uses the paper indexes and will all of them be allowed free or inexpensive access to the on-line databases? Will you provide as much information, particularly abstracts, from on-line searches as the manual files provide so that relevant decisions can be easily made? Will you guarantee on-line retrospective searches of discontinued files, thus increasing the average cost per search? In addition, one will have to take into consideration that some manual files lend themselves more readily to on-line searching and some to manual searching and that some users can define their searches extremely well while others prefer to "wander" through indexes in a field, using a combination of Boolean logic and serendipity. You will also want to collect data for each manual file on the extent to which users make simple single-term searches and Boolean searches for each manual file. If you find that users have extensive needs for Boolean searches, this is a good indication that on-line databases may be a good substitution for these manual files. Answers to all of these concerns are going to be difficult to obtain, but they are necessary if one hopes to justify the funds for on-line searching through discontinuing manual indexes.

In these days of success stories in networking, it would seem that the possibilities are excellent for sharing costs of on-line access with other libraries in the area, permitting all of the libraries to have access to expanded resources but spreading the cost around. The major problem with this option is that the bulk of the on-line costs come as continuing expenses on a per search basis and not from the outlay of funds as a result of equipment. In addition, one also has to contend with the fact that if there is only one terminal available for use to the group, this is going to slow response time — the main reason for using on-line databases — except for the users of one library. Sharing, however, does offer some advantages and the group would have to get together and work out the optional conditions for the situation. The vendors, I should add, usually put no restrictions on these kinds of arrangements.

The usual pattern for those libraries that could not obtain extra funds for on-line use has been to go to a cost-recovery basis for all on-going costs. Several patterns have been reported in the literature: charge every user the actual costs of the search, charge on an estimated ability-to-pay basis (e.g., high for faculty with grants; low for students) but attempt to cover all expenses, charge non-college users above cost so that you can charge lower rates for student use. All of these patterns have advantages and disadvantages. The ability-to-pay system is a particularly good one because it recognizes the reality of the academic situation in regards to student finances as well as that certain disciplines have greater access to grant funds than others. Outside users may find that charges for a search are "cheap at twice the price" because they would not be able to obtain access without far greater expenditures. This may, and some librarians report this, gain the library good publicity in the community. There are, however, restrictions on doing this for certain databases. If new funds for on-line access are impossible or if the current budget cannot allow for it, then these alternatives may provide this resource to your library.

The final option is, of course, to pay for on-line access out of the library budget by slowly allocating additional funds year-by-year until one is able to support this new service at the desired/needed level. By starting out on a small scale, one gains experience in use of on-line systems, develops a systematized approach, finds out what users need and how to obtain it for them in a cost-effective manner, slowly gathers information on the possibilities of dropping subscriptions to manual files and, most importantly, does

not charge users for the service. It sounds good but it may not work because some users may demand the services before you can afford to pay for it out of current funds. In these cases you may have to charge those users, thus departing from your plan, or simply refuse this type of service. Choices, hard choices, will have to be made.

What Shall We Do?

This brings us to a series of final questions. What decisions should we make regarding use? Which vendor should we use? How can we afford the cost? It should be obvious that my central recommendation is to study the facts in your situation. It should be equally obvious, however, that I think the college library should begin using commercial on-line databases. I think most college libraries can afford them and should begin determining the best way to do this. I would advise a "toe-in-the-water" approach at first, gathering good data at each step along the way about use, satisfaction, efficiency and effectiveness. My personal opinion is that libraries *should not* charge for this new service but should attempt to find ways to incorporate the cost into the regular budget. I recognize, however, that this is not easily accomplished, particularly in the beginning, and that one needs a flexible and not a hard line one on the pay vs. "free" issue. For an excellent discussion of "free" vs. user charge argument, I suggest Peter G. Watson's edited compilation of papers presented at the 1977 meeting of RASD/MARS.[8] The papers include an historical look at charging for library services, the intellectual issue, and an analysis of options open to libraries providing on-line access.

There is, I feel, a definite place for commercial on-line databases in the college library. They have great potential in expanding access for users and in increasing the ability of the library to respond quickly to information needs. One should not, however, view them as a "magic potion" capable of solving any ailment of the library. One still has to deal with the problems of the reference interview, selection of the best database, formulating a good search strategy, and, most importantly, evaluating the results of the search. All of these are difficult problems that will not go away because you have access to on-line databases. Fortunately, we are beginning to build a fairly large body of literature[9] on these problems and librarians are beginning to share this information through local and national user groups.[10] In addition, the Machine Assisted Reference Section (MARS) of A.L.A.'s Reference and Adult Services Section is working on such issues as standards, statistics, and evaluation of services.[11]

Finally, at the risk of overgeneralizing, it appears that on-line bibliographic databases have one major advantage and one major disadvantage. Respectively, these are speed and cost. Each library has to work out its own proper balance of these two aspects. I suspect that the small college library will have a more difficult time working this out than the larger academic libraries. I hope that I have given you some help in accomplishing this work.

NOTES

[1]Danuta A. Niteki, "Attitudes Toward Automated Retrieval Services Among RASD Members" *RQ* (Winter 1976): 136-137.

[2]William Katz, *Introduction to Reference Work*, 3rd. ed. (N.Y.: McGraw-Hill, 1978), vol. II, p.125. Peter G. Watson, ed., *On-Line Bibliographic Services – Where We Are, Where We're Going* (Chicago: ALA, RASD/MARS, 1977).

[3]Carlos A. Cuadra, "Commercially Funded On-line Retrieval Services — Past, Present and Future" *ASLIB Proceedings* 30 (January 1978): 2-15.

[4]Martha Williams and Sandra Rouse, *Computer-Readable Bibliographic Data Bases* (Washington, D.C.: ASIS, 1976), updated via a regular column by the authors in the *ASIS Bulletin*.

[5]"News from the Field: Battelle to Study Linking of Bibliographic Utilities" *RTSD Newsletter* (January/February 1980): 10.

[6]Pamela Kobelski and Jean Trumbore, "Student Use of Online Bibliographic Sources." *Journal of Academic Librarianship* (March 1979): 14-18.

[7]James H. Bennet, "The New Prices — Some Comparisons" *Online* 1 (April 1977): 9-23. Also valuable is Richard J. Blue, "Questions for Selection of Information Retrieval Systems" *Online Review* 3 (March 1979): 58-64.

[8]Peter G. Watson, ed. *Charging for Computer-Based Reference Services* (Chicago: ALA RASD/MARS, 1978).

[9]Donald T. Hawkins, "Online Information Retrieval Bibliography: Second Update" *Online Review* 3 (March 1979): 39-73.

[10]These are reported in various publications such as *Online*, *Online Review* and *Messages from MARS*.

[11]*Messages from MARS*, no. 11 (Sept. 1979).

Following Mr. Williams' paper, the audience was treated to demonstrations of three commercial information systems. Representatives from each vendor explained their systems and then used questions from the audience to demonstrate the systems to small groups who watched the searches as they took place. After the entire audience had a chance to see each system in operation, everyone reassembled to hear the following summary presented by Dean Watt of Washington and Lee University.

Summary of the Conference

WILLIAM J. WATT
Dean of the College
Washington and Lee University

Maurice Leach gave me lots of things to read in preparation for this conference. I noted with pleasure that Dean Sleeper indicated that his librarian had provided him with some of the same materials which I found particularly interesting. As is usually the case with college administrators, I didn't have time to read all of the articles which Maurice selected for me, so any glaring lacunae in my knowledge are my own fault, not Maurice's.

One thing I read was the *Chronicle of Higher Education*'s article on the Carnegie report entitled "Three Thousand Futures: The Next Twenty Years For Higher Education." This report, with its predictions of dwindling numbers of students, particularly for private liberal arts colleges like the ones represented here, seems to counterpoint our discussion of the role of the college library. Although the report stresses at every level the importance of preserving "the private sector of higher education with its autonomy intact and its diversity maintained," it also outlines the dangers, principally decreasing support from tuition, grants, and private money which lie in wait during the next decade.

In his welcome, Maurice asked the central question that he sought to have answered by this conference: "What, if any, library resources are needed to support research on a small, private liberal arts campus?" President Huntley put this question another way by pointing out that administrators must consider how the funds available can best further the institution's academic pursuits. How should money be allotted among the various kinds of support for research — the book budget, the cost of advanced technologies used by the library, and even the direct costs for laboratory equipment and supplies — always of great concern to a scientist?

Although we have heard many interesting and insightful talks and have discussed these questions thoroughly, I don't believe we have reached a consensus as to what the answers should be. In reading the report of the Bowdoin conference of 1963, I found some of the same questions being asked but with different responses being given. Certainly one of the issues emphasized yesterday was the question of for whom the collection is designed — for the students or for the faculty? In 1963, Thornton stressed that a college needed library facilities to hold its faculty. In the 1979 article of Miller and Rockwood which Dean Sleeper quoted, the college librarian's primary goal was to build a collection for undergraduate students. Perhaps there is

some principle of economics here. In 1963 there was a shortage of faculty members and in 1979 there was a predicted shortage of students. I am undoubtedly being too cynical, for in the Bowdoin report there was also a paper on the importance of the library for student use — to provide for honors work, for independent study, and for the introduction of students at the basic level to the use of library materials. In our discussions there seemed to be general agreement that we should first provide the basic collection which the undergraduate needs. But we should too, as Dr. Coulling so eloquently argued, nourish the research of the faculty members. As Kirkland pointed out in the Bowdoin report, a teacher must be a researcher "to retain sharpness of analysis . . . to transmit to his students a feeling of craftmanship . . . to be persuasive." In addition, there seems to be consensus that each college might have some collections in depth, particularly those related to the history or special purposes of the college itself. In justifying these collections, Kirkland alluded to Perry Miller's significant study *The Puritan Mind* which was based on those extensive series of sermons which most librarians "detest" and long to discard. Perhaps only fifty percent of the books purchased by libraries are ever used, but the problem is in determining which fifty percent and even when the books will be used. Recently, one of my colleagues at VMI found a book, published around 1850, in the Washington and Lee Library which he said had never before been checked out. But it was essential to his research on explorations of the Dead Sea in 1848. Perhaps some of the books we are purchasing now will still be essential in 2080. I hope they will all be used at least once before then, however.

Maurice and the members of his staff who planned this conference wisely divided the major questions into several subtopics and subquestions. We were fortunate indeed to hear Bill Hannaford's report on his investigation of collection development in colleges in New England. Although the results of his study indicated that no good program of collection development existed in these institutions, our understanding of what is needed was greatly enhanced by his work. As in most of our undertakings, a person and a plan are essential. Our discussions gave no indication that the private colleges in Virginia have made any more progress in this area than the New England ten, but Bill Hannaford's arguments seemed to convince many librarians to adopt the improvements he suggested.

I was impressed by the various points of view which the panelists provided in their remarks. Craig Cornett listed the needs which he has as a student undertaking research. His successful experiences in the Washington and Lee library are at least partly due to his own careful planning and illustrate how effective support can be given an undergraduate. John Handelman's plea for help in the use of special data collections may be seen as a forerunner of many such pleas which will develop as computers become more sophisticated and as more tons of information become available. Sid Coulling's list of the kinds of support needed by faculty for their research should be taken to heart by all administrators present. John Ryland's comments on the who, what, how, and when of selection procedures contain valuable insights for librarians and teachers. I can only add a footnote to the "when" by saying that in science, most books are at least two years out of date when they are published, so you can probably wait for a review if you have any doubts — several month's delay is not significant. Freeman Sleeper stressed the curriculum-centered library as an answer to the faculty vs. student problem. He indicated that faculty needs for research can best be met by sharing resources and by technological innovations — approaches which will require the faculty to adapt to changed ways of using library materials.

The discussion groups sought definitive answers to the subquestions outlined. Among the points stressed were the value of browsing in the traditional book collection in

increasing the knowledge of the students and faculty. The phrase "serendipity in the stacks" reminded me of a friend who married a librarian whom he met and courted in the stacks of the University of Virginia Library. You can never tell what you will find while browsing — I hope your luck is as good as his. As a Dean, I always like to hear about something you can get for nothing or, at least, almost nothing. I'm talking about government documents which can supplement collections if selected carefully. All the groups stressed cooperative measures, but, as yet, interlibrary loan seems to be the only one used often. New networks, the Virginia State Library COM catalogue, and the National Periodical Center were cited as developments which would be of assistance in the future and might, perhaps be more economical. These projects seem to me to be important areas in which the state and federal governments can play an important role in strengthening library service. Of course, we must consider the Carnegie report's cautions against the excessive control of higher education by governmental bodies, but these giant projects require the funds which only the state or the nation have available. Service can be provided in these areas without the imposition of controls over the colleges served.

This morning we have seen the future and I can't resist saying it is MARS. Dr. Williams has given us a useful and comprehensive list of questions we must consider before we become involved with commercial information retrieval systems. Perhaps you were as pleased as I was to find the "bottom line" figure was not too overwhelming and were as concerned as I was as to what would have to be sacrificed to afford it. The machines themselves gave useful demonstrations of a new approach to literature searching. I will have to make some changes in my library course next year.

In summary, then, we have raised and discussed the questions central to the operation of a college library. The conflicts seem to be in the areas of students vs. faculty, books vs. machines, shared resources vs. special collections, balance vs. additional support for new programs, a directed collection development vs. meeting faculty needs or demands, but, unfortunately, there seems to be no absolute right vs. absolute wrong. Since the library is central to the educational process at any college or university and since, according to the Carnegie report, the strength of our programs will determine whether our institutions survive, these are very important questions for us to consider. Bob Williams has really answered all our questions for us with his motto, "It depends." Each institution here will need different answers to these problems. We have improved our thinking about each of them. Certainly there is consensus that the solutions will come out of groups like this involving the interaction of faculty, students, administrators, and librarians to provide better library service for our institutions. Maurice Leach and his planning group are to be commended for bringing this group together for these interesting and important discussions.

Participants: Library Resources For College Scholars

1. *AVERETT COLLEGE*
   - Juanita Grant, *Librarian*
   - Mary Evelyn Jefferson, *Reference Librarian*
   - Julius R. Ruff, *Assistant Professor of History*
2. *BRIDGEWATER COLLEGE*
   - Orland Wages, *Librarian*
3. *EASTERN MENNONITE COLLEGE*
   - Samuel Horst, *Instructor in Biblical Studies*
   - Albert N. Keim, *Dean of the College*
   - Grace Showalter, *Librarian*
   - Milo Stahl, *Director of Learning Resources*
4. *EMORY AND HENRY COLLEGE*
   - Steve Roehling, *Assistant Librarian*
   - Dan Weese, *Department of Psychology*
5. *HAMPDEN-SYDNEY COLLEGE*
   - Joseph Goldberg, *Professor of Political Science*
   - Daniel Poteet, *Dean of Faculty*
   - John Ryland, *Librarian*
6. *HAMPTON INSTITUTE*
   - Jason Grant, *Librarian*
   - Francis Grimes, *Faculty*
7. *HOLLINS COLLEGE*
   - Lillian Cooper, *Cataloger*
   - Richard Kirkwood, *Librarian*
   - Roberta Stewart, *Dean*
8. *LYNCHBURG COLLEGE*
   - Brenda J. Bateman, *Library*
   - John Edward Petty, *Dean of Graduate Studies and of Continuing Education*
   - Gwynn W. Ramsey, *Faculty*
   - Mary Scudder, *Librarian*
   - Julius A. Sigler, *Chairman, Physics Department and Director of Graduate Studies in Science*
   - George R. White, *Library*
9. *MARY BALDWIN COLLEGE*
   - Dorothy M. Mulberry, *Dean of the College*
   - Margaret F. Pinkston, *Assistant Professor of Biochemistry*
   - William C. Pollard, *Librarian*
10. *RANDOLPH-MACON WOMAN'S COLLEGE*
    - Ruth Ann Edwards, *Librarian*
    - Jan Johnson, *Acquisitions Librarian*
    - Anne S. Kimball, *Dean of the College and Associate Professor of Romance Languages*

Robert B. Lloyd, *Charles Dana Professor of Classics*

11. *UNIVERSITY OF RICHMOND*
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Dennis E. Robison, *University Librarian*
Melvin Vulgannore, *Provost and Academic Dean*

12. *ROANOKE COLLEGE*
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George E. Craddock, Jr., *Librarian*
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Lucile Snow, *Librarian*
Robert R. Warter, *Assistant Professor of English and Chairman of the Self-Study Committee*

13. *SAINT PAUL'S COLLEGE*
Annie Harrison, *Librarian*

14. *STATE COUNCIL OF HIGHER EDUCATION*
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15. *SWEET BRIAR COLLEGE*
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John Jaffe, *Acquisitions and Rare Book Librarian*
Henry James, *Librarian*
Joan R. Kent, *Associate Professor of History*
Rosalie Murphy, *Assistant Professor of English*

16. *VIRGINIA FOUNDATION FOR INDEPENDENT COLLEGES*
Dick Sessoms, *Associate Executive Director*

17. *WASHINGTON AND LEE UNIVERSITY*
Maurice D. Leach, Jr., *University Librarian*
Robert E. R. Huntley, *President*
Thomas Nye, *Chairman, Library Advisory Committee and Head of the Biology Department*
Craig Cornett, *Politics Major*
John R. Handelman, *Associate Professor of Politics*
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INFORMATION RETRIEVAL SYSTEMS VENDORS

BRS	—Liz Marlow
LOCKHEED	—Richard Caputo
SDC	—Irene Norris